

**What is claimed is:**

1. A radio protocol for a mobile communication system, comprising:

A radio link control layer which connects to an upper layer through a service access point provided in advance and which connects to a lower layer through a plurality of logical channels provided in advance, the said radio link control layer including at least one radio link control entity for transmission/reception of data to/from up-link or down-link according to a form of data transmission mode.

2. A radio protocol as claimed in claim 1, wherein the radio link control layer further includes:

a RLC-transparent entity either for receiving an SDU from the upper layer, dividing the SDU into a plurality of PDUs and providing the PDUs to the lower layer, or for receiving the plurality of PDUs from the lower layer, reassembling the PDUs into an SDU and providing the SDU to the upper layer;

a RLC-unacknowledged entity either for receiving the SDU from the upper layer, conducting framing in which the SDU is divided into a plurality of PDUs with a header and providing the PDUs to the lower layer, or for receiving a plurality of PDUs from the lower layer, separating a header

from each of the PDUs, reassembling the PDUs into the SDU depending on a presence of error and providing the SDU to the upper layer; and

a RLC-acknowledged entity for correcting an error in the PDU or retransmitting the PDU depending on presence of the error in the plurality of PDUs received from the lower layer.

3. A radio protocol as claimed in claim 1, wherein the radio link control layer further includes multiplexing/demultiplexing block which performs multiplexing/demultiplexing the received PDUs in order for part of the above radio link control entities to be connected to the lower layer through the above a plurality of logical channels.